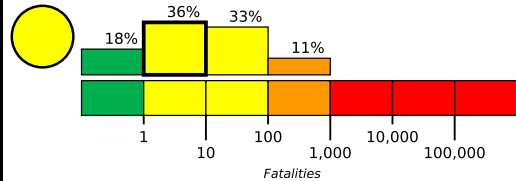


M 5.4, 26 km S of Dezhou, China  
Origin Time: 2023-08-05 18:33:58 UTC (Sun 02:33:58 local)  
Location: 37.2108° N 116.3785° E Depth: 10.0 km

PAGER Version 4

Created: 1 day, 0 hours after earthquake

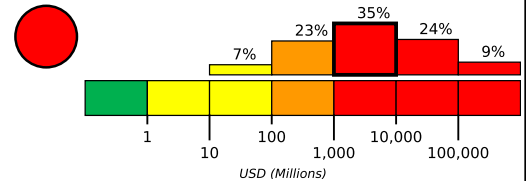
Estimated Fatalities



Red alert for economic losses. Extensive damage is probable and the disaster is likely widespread. Estimated economic losses are less than 1% of GDP of China. Past events with this alert level have required a national or international level response.

Yellow alert for shaking-related fatalities. Some casualties are possible.

Estimated Economic Losses

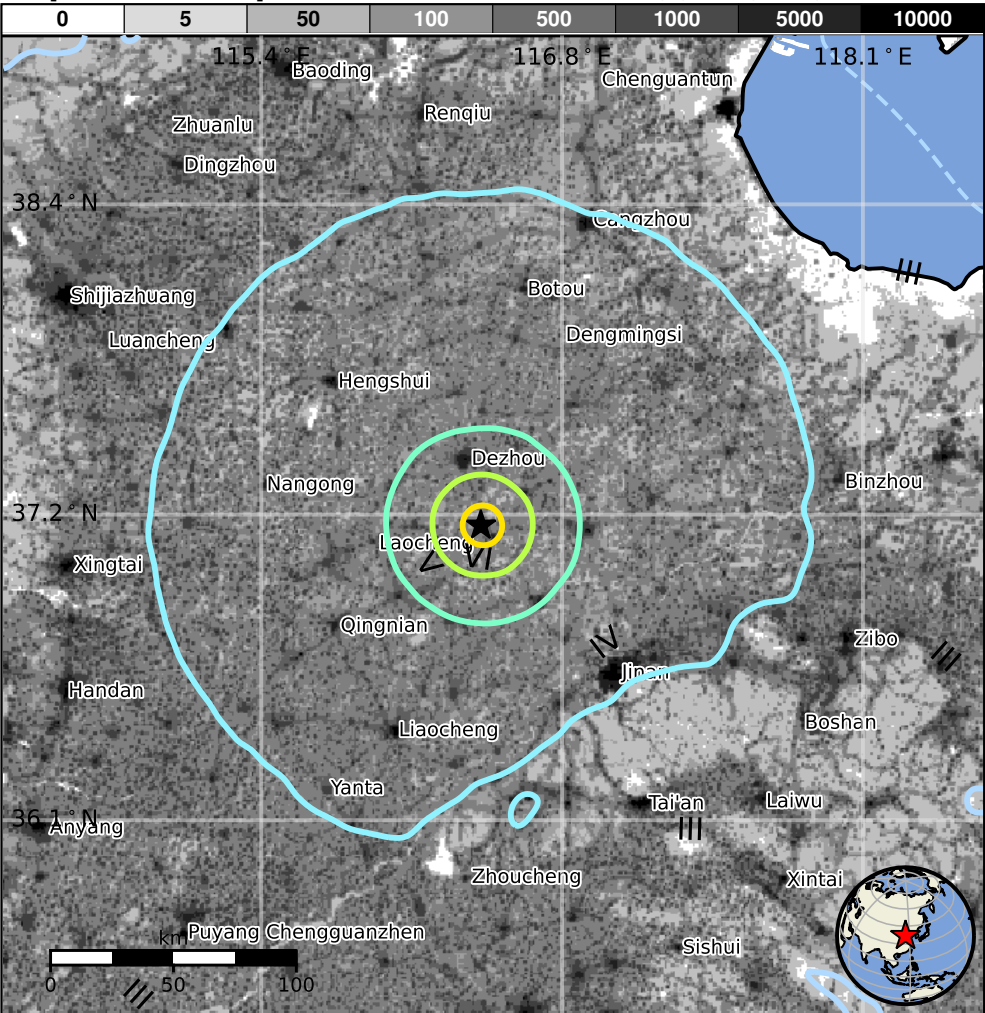


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	73,294k*	32,251k	2,305k	459k	164k	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

\*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though resistant structures exist. The predominant vulnerable building types are adobe block and unreinforced brick with mud construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1989-10-18	371	5.4	VII(48k)	29
1983-11-06	244	5.5	VII(1,118k)	45
1976-07-27	296	7.6	IX(2,383k)	242k

Selected City Exposure

MMI	City	Population
V	Lingcheng	<1k
V	Dezhou	380k
V	Xinhu	<1k
V	Jiamaying	2k
IV	Xiliguantun	2k
IV	Laocheng	4k
IV	Jinan	4,336k
III	Tai'an	5,499k
III	Zibo	3,129k
III	Handan	1,358k
III	Shijiazhuang	2,835k

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

bold cities appear on map. (k = x1000)